



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/675,660

09/30/2003

Timothy M. Simon

32355.12.44.4

5821

22859

7590

05/18/2009

INTELLECTUAL PROPERTY GROUP

FREDRIKSON & BYRON, P.A.

200 SOUTH SIXTH STREET, SUITE 4000

MINNEAPOLIS, MN 55402

EXAMINER

WILLSE, DAVID H

ART UNIT

PAPER NUMBER

3738

MAIL DATE

DELIVERY MODE

05/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/675,660	Applicant(s) SIMON ET AL.	
	Examiner David H. Willse	Art Unit 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12, 15, 17-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12, 15, 17-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3738

The Amendment of January 9, 2009, fails to comply with 37 CFR 1.121(c)(2) in that certain text insertions and deletions have not been indicated with underlining and strike-through, respectively. For example, in claim 12, line 3, “between distal and proximal ends” should have been underlined, and on line 6, “~~maximal~~” should have been inserted (with strike-through) between “outermost” and “periphery”

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18 and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The preformed mass having both a cylindrical shape (claim 12, last two lines) and a frusto-conical shape (claim 19) or differing proximal and distal cross-sections (claim 18) is not supported in the original disclosure.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 3738

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, US 6,120,541, in view of Stone et al., US 5,306,311. Johnson discloses a cartilage plug **16** for insertion into a void **12** in cartilaginous tissue **10** (Figures 1 and 2), the cartilage plug having a plurality of ridges in the form of a single helix (column 1, lines 51-53) formed outward of and extending about an outermost periphery so as to securely engage the wall **14** thread formed by the tap (column 1, lines 48-49; column 1, line 58, through column 2, line 3). Johnson is silent as to particular materials and thus lacks a description of porous surfaces and a lubricious surface on at least one end of the plug **16**. However, such features were well known in the art at the time of the present invention, as seen, for example, from Stone et al. (column 3, lines 15-17; column 7, lines 49-53; column 10, lines 16-34; Table I; etc.). To fabricate the plug **16** of Johnson so as to have porous surfaces and a lubricious surface would have been obvious in order to facilitate “the ingrowth of articular chondrocytes” (Stone et al.: column 3, lines 15-18; column 6, lines 10-16; etc.) and in order to provide lubrication to the joint articular surface (Stone et al.: column 1, lines 24-29; column 7, lines 49-56; etc.), with the ordinary practitioner having been left to select an appropriate material.

Claims 12, 15, 17-19, 21, 22, 26, 27, 29, and 30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schwartz, US 5,632,745, which discloses a cartilage plug **16** (Figure 2) having a plurality of ridges **64** formed outward of and extending about an outermost periphery

Art Unit: 3738

of a preformed mass. The plurality of ridges define, at proximal and distal edges thereof, parallel planes substantially perpendicular to a central axis along bore **58** (column 6, lines 32-35). The overlaid collagen gel (column 8, lines 34-35), for example, forms a lubricious surface.

Regarding claims 18 and 19, the dissimilar cross-sections are best illustrated in Figure 5.

Regarding claim 27, attention is directed to column 5, line 25.

Claims 20, 23-25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz, US 5,632,745. Regarding claim 20, a barb-shaped cross-section would have been an obvious variant in view of the discussion at column 7, line 16 et seq., so as to provide a more secure engagement with complementarily designed windows **66**. Regarding claim 23, the bore **58** having ridges on its interior surface would have been obvious in order to facilitate engagement by a tool for assembling components **14** and **16** (column 6, lines 1-6; etc.). Regarding claim 24 and others, replacing the ridges **64** with a single helix would have been obvious for circular configurations (column 5, lines 54-56) in order to better secure the analogs of components **14** and **16** against relative rotations (and thereby avoid hindering vascular invasion and cellular migration: column 5, lines 35-37).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

SU 1055484 A (Khlopov et al.): drawings; abstract.

The Applicant's remarks have been considered and are adequately addressed in the above grounds of rejection, necessitated by the added claim limitations. Therefore:

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action

Art Unit: 3738

is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Willse, whose telephone number is 571-272-4762 and who is generally available Monday, Tuesday, and Thursday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

**/David H. Willse/
Primary Examiner
Art Unit 3738**